



## Marine Invertebrates

### Worms

#### Annelid worm

*Vermiliopsis torquata*

#### Flatworms

*Pericelis hymanae*

*Pseudobiceros sp. 2*

#### Ko'e kai or

#### Ribbon worm

*Baseodiscus cingulatus*

#### SPECIES STATUS:

IUCN Red List - Not considered  
Endemic

**SPECIES INFORMATION:** *Vermiliopsis torquata* (no common name), Hyman's flatworm (*Pericelis hymanae*), the Hawaiian spotted flatworm (*Pseudobiceros sp. 2*), and ko'e kai or banded ribbon worm (*Baseodiscus cingulatus*) are all endemic worms. All are carnivores and nocturnal. The ko'e kai uses its long proboscis to attack and entrap their prey. Hyman's and Hawaiian spotted flatworms are hermaphroditic. Fertilization is internal and eggs are laid in a gelatinous material. Eggs develop into free-swimming larvae or directly into small flatworms. The ko'e kai has separate sexes and eggs are laid in a gelatinous material and are fertilized externally. Both the flatworms and ko'e kai reproduce asexually by fragmentation or budding.

**DISTRIBUTION:** All species are found throughout the Hawaiian Archipelago.

**ABUNDANCE:** Unknown. Hyman's flatworm is common at Black Point, O'ahu.

**LOCATION AND CONDITION OF KEY HABITAT:** Hyman's flatworm prefers shallow waters and is commonly found under stones. They may also associate with the brown purse shell (*Isognomon perna*). Like Hyman's flatworm, the Hawaiian spotted flatworm is found under stones; however, it is found from the shoreline to waters down to 15 meters (50 feet) deep. Ko'e kai has a large range of primary habitat. It has been found as deep as 76 meters (250 feet), but also lives in shallow waters and tidepools.

**THREATS:** None identified.

**CONSERVATION ACTIONS:** The goals of conservation actions are to not only protect current populations, but to also establish further populations to reduce the risk of extinction. In addition to common state-wide and island conservation actions, specific actions include:

- Maintain healthy habitats.

**MONITORING:**

- Survey for populations and distribution in known and likely habitats.

**RESEARCH PRIORITIES:**

- Improve understanding of factors affecting the species population sizes and distributions.

**References:**

Barnes RD. 1980. Invertebrate zoology, 4<sup>th</sup> edition. Philadelphia, PA: Saunders College Publishing.

Hoover JP. 1998. Hawaii's sea creatures: A guide to Hawaii's marine invertebrates. Honolulu, HI: Mutual Publishing. 366 pp.